



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,683	11/13/2003	Dean Kamen	1062/E11	2318
2101 7590 06/28/2007 BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			EXAMINER NGUYEN, HOANG M	
			ART UNIT 3748	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/714,683

Applicant(s)

KAMEN ET AL

Examiner

Hoang M. Nguyen

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 3,6 and 13-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-5, 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Applicant's amendment dated June 07, 2007, has been fully considered.

First, Applicant's arguments against the 103 rejection based on Kamen in view of Schmidt are found persuasive, and the rejection has been withdrawn. However, the 103 rejections based on Perry, Jr. et al in view of Schmidt are not persuasive and the rejections have been maintained as follows.

Applicant argued Perry does not disclose the concept of using both electricity and waste heat of a heat engine to drive a water distillation plant. The Examiner partly agrees. However, please note figure of Perry teaches that both the electricity from an electric generator and the waste heat of a heat engine can be used to drive a water purification system. It's well known that water distillation is a type of water purification system but with a more specific concept. Schmidt teaches that a water distillation system can be driven as an auxiliary unit by using the waste heat of a heat engine cycle. It would have been obvious to use both the electricity and waste heat in Perry for driving a water distillation system as taught by Schmidt because as noted above, water distillation is a type of water purification, and both are driven by electricity and water.

Applicant argued there is no teaching in Schmidt as how the system can be modified. The Examiner disagrees in the sense that a person having ordinary skill in the art would have known how to set up or replace a water purification by a water

Art Unit: 3748

distillation system because it's commonly known both systems are driven by electricity and waste heat.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-5, 7-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4776171 (Perry et al) in view of U.S. 3243259 (Schmidt).

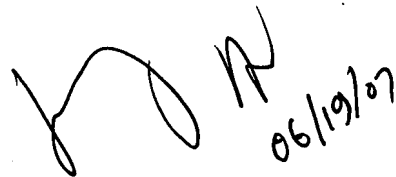
Regarding independent claims 1, 7, 8, Perry et al disclose a water purification system (note figure 2), a thermal engine (methanol engine) driving an electric generator, the electricity from the electric motor is driving the water purification system and the waste heat of said engine is also going into a heat engine which in turn driving said water purification system (note figure 2). Regarding claims 2, 4-5, note figure 7. Regarding claims 9, 11, the engine can be an external combustion engine. Perry et al does not disclose the concept of using both the electricity and the waste heat for driving a water distillation system. Schmidt discloses a water distillation system using waste heat of a heat engine 4 from a pair of heat exchangers 5, 6. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the electricity and the waste heat in Perry et al for driving a water distillation system as taught in Schmidt instead of a water purification system for the purpose of making potable water.

Art Unit: 3748

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
6/19/2007